

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 15, 17 and 20 without prejudice or disclaimer and AMEND claims 1, 3, 4, 5, 7, 12, 13 and 16 as follows.

1 **(currently amended)** An optical pickup comprising:

a first laser beam source generating a first laser-beam;

a second laser beam source generated a second laser-beam having a different wavelength than a wavelength of the first laser beam;

an optical system ~~projecting-diverging~~ the first beam at a predetermined angle, and collimating the second laser-beams-beam into a parallel ray, converging the first and second beams to a signal layer of an optical disk, and transmitting the first and second laser-beams as reflected from the signal layer, the first reflected beam being transmitted as a convergent beam and the second reflected beam being transmitted as a parallel beam;

~~an optical detector detecting the first and second laser beams transmitted from the optical system, the optical detector being optimized with respect to the second laser beam; and~~

an optical converter converting the first laser~~first reflected~~ beam transmitted from the optical system into the ~~laser beam detectable by the optical detector~~ a parallel beam and passing the second reflected beam without conversion; and.

an optical detector detecting the first and second parallel beams from the optical system, the optical detector being optimized with respect to the second laser beam.

2. (original) The optical pickup as claimed in claim 1, wherein the first and second laser beam sources comprise laser diodes.

3. **(currently amended)** The optical pickup as claimed in claim 1, wherein the optical system comprises:

a first collimating lens diverging the first laser-beam at a ~~the~~ predetermined angle, the predetermined angle permitting that permits a fracture surface aberration of the first laser-beam

to fall below a predetermined value when the first laser beam generated from the first laser beam source is collected on the signal layer of the optical disk;

a second collimating lens converting the second laser beam generated from the second laser beam source into a parallel ray;

a prism reflecting the first and second laser beams transmitted through the first and second collimating lenses toward the optical disk, while transmitting the laser first and second beams reflected from the signal layer of the optical disk;

an objective lens ~~collecting~~ converging the first and second laser beams reflected from the prism onto the signal layer of the optical disk; and

a light receiving lens ~~collecting~~ converging the laser first and second beams reflected from the signal layer of the optical disk on the optical detector in the form of an optical spot of a predetermined size.

4. **(currently amended)** The optical pickup as claimed in claim 3, wherein the first laser beam has a wavelength of 640-660nm or 770-800nm and the second laser beam has a wavelength of 400-420nm.

5. **(currently amended)** ~~The optical pickup as claimed in claim 4, wherein the predetermined value is less than or equal to 0.008λ where the λ is the wavelength and the predetermined angle ranges from 0.4° to 0.6° .~~ An optical pickup comprising:

a first laser beam source generating a first laser beam having a wavelength of 640-660nm or 770-800nm;

a second laser beam source generating a second laser beam having a wavelength of 400-420nm;

an optical system comprising:

a first collimating lens diverging the first laser beam at a predetermined angle ranging from 0.4° to 0.6° that permits a fracture surface aberration of the first laser beam to fall below a predetermined value less than or equal to 0.008λ when the first laser beam generated from the first laser beam source is collected on the signal layer of the optical disk, wherein λ is the wavelength of the first laser beam,

a second collimating lens converting the second laser beam generated from the second laser beam source into a parallel ray,

a prism reflecting the laser beams transmitted through the first and second collimating lenses toward the optical disk, while transmitting the laser beams reflected from the signal layer of the optical disk,

an objective lens collecting the laser beams reflected from the prism onto the signal layer of the optical disk, and

a light receiving lens collecting the laser beam reflected from the signal layer of the optical disk on the optical detector in the form of an optical spot of a predetermined size;

an optical detector detecting the first and second laser beams transmitted from the optical system, the optical detector being optimized with respect to the second laser beam; and

an optical converter converting the first laser beam transmitted from the optical system into the laser beam detectable by the optical detector.

6. (original) The optical pickup as claimed in claim 1, wherein the optical detector comprises a photo diode.

7. (currently amended) The optical pickup as claimed in claim 1, wherein the optical converter ~~includes~~ comprises a holographic lens having a pattern by which the second ~~laser-reflected~~ beam is directly transmitted without conversion, while the first ~~laser-reflected~~ beam is converted into the parallel rays~~beam~~.

8. (original) The optical pickup as claimed in claim 7, wherein the pattern has a concentric annular concave-convex portion in which a plurality of annular prominences and depressions are arranged.

9. (original) The optical pickup as claimed in claim 8, wherein the depression and the prominence have a width that gradually decreases from the center of the optical converter toward the most outer circumference of the concentric annular concave-convex portion.

10. (original) The optical pickup as claimed in claim 8, wherein an inner surface of each prominence has a step-like shape formed with at least one step.

11. (original) The optical pickup as claimed in claim 10, wherein the number of the step ranges from three to five.

12. **(currently amended)** An optical pickup comprising:

- a first laser diode generating a first laser beam;
- a second laser diode generating a second laser beam having a different wavelength than the first laser beam;
- a first collimating lens diverging the first laser beam at a predetermined angle;
- a second collimating lens converting the second laser beam into parallel rays;
- a prism reflecting the laser beams transmitted through the first and second collimating lenses toward an optical disk, and transmitting reflected laser beams from a signal layer of the optical disk;
- an objective lens collecting the reflected laser beams from the prism on the signal layer of the optical disk;
- a light receiving lens collecting the reflected laser beams from the signal layer of the optical disk in the form of optical spot of a predetermined size;
- a photo diode detecting the optical spot collected by the light receiving lens; and
- a holographic lens converting the first laser beam into parallel rays so as to form the optical spot, of the first and second laser beams having identical sizes and passing the second laser beam without conversion.

13. **(currently amended)** An optical disk drive comprising:

- an optical pickup projecting a laser beam to an optical disk and detecting a signal from the reflected laser beam, said optical pickup comprising:
 - first and second laser beam sources generating a first and second laser beams respectively, the first and second laser beams having different wavelengths;
 - ~~an optical system projecting the first and second laser beams onto a signal layer of the optical disk;~~
 - a first collimating lens diverging the first laser beam at a predetermined angle,
 - a second collimating lens converting the second laser beam into parallel rays,
 - a prism reflecting the laser beams transmitted through the first and second collimating lenses toward the optical disk, and transmitting the first and second laser beams as reflected from the signal layer of the optical disk,
 - an objective lens collecting laser beams reflected from the prism on the signal layer of the optical disk,
 - ~~detecting means for a detector~~ detecting the first and second laser beams as reflected from the signal layer of the optical disk, and

a light receiving lens collecting laser the reflected laser on the detector in a form of an optical spot of a predetermined size; and

~~optical converting means for converting the first and second laser beams as reflected from the signal layer of the optical disk so that the converted first and second laser beams are detectable by the optical detecting means; and~~

an optical converter converting the first reflected laser beam to a parallel beam and passing the second reflected laser beam without conversion, the optical converter comprising a holographic lens having a pattern converting the first laser beam into parallel rays to cause the size of the optical spots generated by the first and second laser beams to be identical;

a driving section moving the optical pickup to a desired portion of the optical disk;

a signal processing section processing the signal detected by the optical pickup and converting the signal into information; and

a controlling section ~~for~~ controlling the optical pickup, the driving section, the signal processing section.

14. (original) The optical disk drive as claimed in claim 13, wherein the first and second laser beam sources comprise laser diodes.

15. (cancelled)

16. (currently amended) The optical disk drive as claimed in claim 13, wherein the ~~detecting means~~ detector comprises a photo diode.

17 -20 (cancelled)